IC18. VEHICLE AND EQUIPMENT FUELING

1. Use properly maintained off-site fueling stations whenever possible.
2. Maintain clean fuel-dispensing areas.
3. Design fueling areas to minimize stormwater exposure.
4. Minimize pooling of water.
5. If conducting mobile fueling, designate mobile fueling areas and bring equipment to these areas.
6. Utilize fueling safeguards.
7. Conduct regular inspections of fueling equipment.
8. Use secondary containment when transferring fuel from the tank truck to the fuel tank and cover storm drains in the vicinity during transfer.
9. Fit underground storage tanks (USTs) with spill containment and overfill prevention systems meeting the requirements of Section 2635(b) of Title 23 of the California Code of Regulations.
10. Equip USTs with spill and overfill protection.
11. Install required AQMD equipment and post a notice.
12. Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.

OPTIONAL:

13. Post signs to remind employees and customers not to top off the fuel tank when filling and signs that ban customers and employees from changing engine oil or other fluids at that location.

Pollution Prevention

Consider pollution prevention measures at all times for improving pollution control. Implementation of pollution prevention measures may reduce or eliminate the need to implement other more costly or complicated procedures.

The following pollution prevention principles apply to most industries:

- Affirmative Procurement - Use alternative, safer, or recycled products.
- Redirect storm water flows away from areas of concern.
- Reduce use of water or use dry methods.
- Reduce storm water flow across facility site.
- Recycle and reuse waste products and waste flows.
- Move or cover potential pollution from storm water contact.
- Provide on-going employee training in pollution prevention.

Best Management Practices

1. **Use properly maintained off-site fueling stations whenever possible.** These businesses are better equipped to handle fueling and spills.
2. **Maintain clean fuel-dispensing areas.**
    - Use dry cleanup methods such as sweeping for removal of litter and debris, or use of rags and absorbents for leaks and spills.
    - If cleaning by washing, place a temporary plug in the downstream drain and pump out the accumulated water. Properly dispose of the water. **DO NOT** discharge wash water to sanitary sewer until contacting the local sewer authority to find out if pretreatment is required.
3. **Design fueling areas to minimize stormwater exposure.**
    - Cover the fuel dispensing area such that the cover's minimum dimensions are equal to or greater than the area within the grade break or fuel dispensing area. Position roof downspouts to direct water away from fueling areas.
    - Pave fuel area with Portland cement concrete or equivalent smooth impervious surface. Grade with a 2 to 4 percent slope to prevent ponding.
    - Use secondary containment. Construct a berm around the perimeter of the material storage area to prevent the runon of uncontaminated stormwater from adjacent areas as well as stormwater runoff.

4. **Minimize pooling of water.**
    - Use a perimeter drain or slope pavement inward with drainage to sump. A minimum slope of 1.5 percent is recommended.
    - Install inlet catch basin equipped with a small sedimentation basin or grit chamber to remove large particles from stormwater in impervious areas.
    - During the wet season, release accumulated stormwater frequently.
5. **If conducting mobile fueling, designate mobile fueling areas and bring equipment to these areas.**
    - Use secondary containment when conducting mobile fueling.
    - Cover storm drains in the vicinity during transfer.
6. **Utilize fueling safeguards.**
    - Use overflow protection devices on tank systems to warn the operator to automatically shutdown transfer pumps when the tank reaches full capacity.
    - Install protective guards around tanks and piping to prevent vehicle or forklift damage.
    - Clearly tag or label all valves to reduce human error.
    - Place spill kits at fueling areas and/or on vehicles.
    - Install vapor recovery nozzles to help control drips as well as air pollution.
    - Eliminate or post hose bibs.

    OPTIONAL:
    - Fit fuel dispensing nozzles with "hold-open latches" (automatic shutoffs) except where prohibited by local fire departments.
7. **Conduct regular inspections of fueling equipment.**
    - Check fueling equipment for external corrosion and structural failure.
    - Check for spills and overfills due to operator error.
    - Check for failure of piping system.
    - Check for leaks or spills during pumping of liquids or gases from truck or rail car to a storage facility or visa versa.
    - Visually inspect new tank or container installation for loose fittings, poor welding, and/or improper or poorly fitting gaskets.
    - Inspect tank foundations, connections, leaks, cracks, scratches, and other physical damage that may weaken the tank or container system.
    - Report leaking vehicles to fleet maintenance.

    OPTIONAL:
    - Periodically, have a qualified professional conduct integrity testing.

8. **Use secondary containment when transferring fuel from the tank truck to the fuel tank and cover storm drains in the vicinity during transfer.**
9. **Fit underground storage tanks (USTs) with spill containment and overfill prevention systems meeting the requirements of Section 2635(b) of Title 23 of the California Code of Regulations.**
10. **Equip USTs with spill and overfill protection.**
11. **Install required AQMD equipment and post a notice.**

12. Training

1. **Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.**
2. **Train employees on proper fueling and cleanup procedures.**
3. **Train employees on proper spill containment and cleanup.**
   - Establish training that provides employees with the proper tools and knowledge to immediately begin cleaning up a spill.
   - Ensure that employees are familiar with the site's spill control plan and/or proper spill cleanup procedures.
   - BMP IC17 discusses Spill Prevention and Control in detail.
4. **Establish a regular training schedule, train all new employees, and conduct annual refresher training.**
5. **Use a training log or similar method to document training.**

OPTIONAL:

13. **Post signs to remind employees and customers not to top off the fuel tank when filling and signs that ban customers and employees from changing engine oil or other fluids at that location.**

References

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